

**Agency: Commerce, Community and Economic Development****Grants to Named Recipients (AS 37.05.316)****Grant Recipient: Copper Valley Electric Association****Federal Tax ID: 92-0023631****Project Title:**

# Copper Valley Electric Association - Valdez Diesel Plant Substation Upgrade

**State Funding Requested: \$ 500,000****House District: 12 - F**

One-Time Need

**Brief Project Description:**

CVEA's current power supply needs include replacement of a key piece of electric equipment in the Valdez Diesel Plant substation.

**Funding Plan:****Total Cost of Project: \$600,000**

	<u>Funding Secured</u>		<u>Other Pending Requests</u>		<u>Anticipated Future Need</u>	
	<i>Amount</i>	<i>FY</i>	<i>Amount</i>	<i>FY</i>	<i>Amount</i>	<i>FY</i>
Other	\$100,000	2009				
Total	\$100,000					

*Explanation of Other Funds:**Funds are CVEA funds***Detailed Project Description and Justification:**

The 10 MVA power transformer at the Valdez Diesel Plant Substation provides voltage transformation from the 24.47 kV distribution system. This transformer is one of CVEA's most critical assets. an extensive maintenance program dictates this vital piece of equipment should be replaced. No other utility in the state has a spare to match the capacity needed for our application. A new unit can be available for delivery in 46 to 52 weeks after receipt of an order at a cost of approximately \$500,000.

**Project Timeline:**

46 to 52 weeks

**Entity Responsible for the Ongoing Operation and Maintenance of this Project:**

Copper Valley Electric Association

**Grant Recipient Contact Information:**

Contact Name: Robert Wilkinson

Phone Number: (907) 822-3211

Address: PO Box 927

Valdez, AK 99686-0927

Email: Wilkinson@cvea.org

Has this project been through a public review process at the local level and is it a community priority? ☒ Yes ☐ No

## Talking Points in Support of CVEA 2008 Request for Appropriation

### About CVEA

CVEA serves 8,000 residents in Valdez and the rural Copper River Basin. The Cooperative generates power from three sources (Hydro-60%; Cogeneration-25% and Diesel-15%). The average revenue per residential kilowatt-hour in 2007 was 28.5¢ and 25.8¢ in Copper Basin and Valdez, respectively. CVEA customers do not receive power cost equalization. CVEA is a stand-alone utility in that we are not connected electrically to the Railbelt grid or to any other utility.

### Power Supply Planning

Power supply planning is an ongoing process at CVEA.

Current Needs – CVEA's current power supply needs includes completion of an upgrade to our Glennallen Diesel Plant (GDP) and the replacement of a key piece of electric equipment in the Valdez Diesel Plant substation. Those projects are further explained below.

- GDP Upgrade \$2,000,000

CVEA operates four power plants; three in Valdez and one in Glennallen. The communities are connected by road and a 138 KV transmission line owned by the Four Dam Pool. The t-line is vulnerable to prolonged outage caused by weather and avalanche (six events since 1986, once as long as nine months). When the t-line is out of service, the GDP must serve the electric load in the Copper Basin. Prime generation in GDP was installed in 1975-76. The GDP upgrade will install a new state of the art, more efficient diesel generator set in the Glennallen Plant.

The total cost of the project is \$3.9 million. In 2003 CVEA was awarded a \$1.9 million matching grant by the federal Department of Energy to construct additional generation in the Glennallen Diesel Plant. The DOE grant requires matching funding from a non federal source. If the state appropriation is obtained, this project can be completed at no cost to the members.

- VDP Transformer \$500,000

The 10 MVA power transformer at the Valdez Diesel Plant Substation provides voltage transformation from the 24.94 kV provided by the Solomon Gulch circuit to the downtown 12.47 kV distribution system. This transformer is one of CVEA's most critical assets. An extensive maintenance program dictates this vital piece of equipment should be replaced. No other utility in the state has a spare to match the capacity needed for our application. A new unit can be available for delivery in 46 to 52 weeks after receipt of an order at a cost of approximately \$500,000.

Future Needs - As we look toward the future our focus is on successful completion of the above mentioned reliability projects at minimal cost to the customer and on investigating opportunities to reduce the cost of power by decreasing our reliance on fossil fuels to generate electricity.

While CVEA is fortunate to have the Solomon Gulch Hydroelectric facility in our power supply portfolio, we remain dependent on fossil fuel plants for 40% of our annual generating requirement.

- Allison Lake License Application \$1,000,000

Following completion of several studies in the past year, on March 3, 2008, CVEA filed an application for a preliminary permit to develop the hydroelectric potential of Allison Lake (near Valdez). The permit, which CVEA expects to be awarded in June, is for a three-year period. During the term of the permit CVEA will conduct environmental studies (fisheries, terrestrial, cultural, recreation), work with state and federal agencies (and other stakeholders) and perform engineering work necessary to fulfill the requirements of a FERC license application. The estimated cost to prepare a bonafide license application is \$1 million.

#### Other Capital Projects

- F421 Circuit Split to the Hub \$500,000

Currently one feeder from the Glennallen Substation serves the majority of the Copper Basin from Copper Center north to MLR1 and the HAARP site. Load growth has increased on this feeder to the point where a new feeder has been justified. The project will involve conversion of the Solomon feeder to a double circuit and a new circuit from where the Solomon circuit crosses the Glenn Highway to the intersection of the Glenn and Richardson Highways.

- Lake Louise Road Line Extension \$1,200,000

This line extension would extend a single-phase distribution line 9.5 miles down the Lake Louise Road or approximately half way to the lake. This would enable CVTC and AT&T communication sites to obtain electric service.

- Tiekel River Line Extension \$700,000

This line extension would be six miles in length and would serve an estimated six new customers including one lodge and an Alyeska remote gate valve site.

- Other Projects

CVEA has identified numerous line extension projects which, if funding were available, could add a significant number of customers to CVEA's system. Many of these projects cannot otherwise be afforded without some financial assistance.